WO 2004/060169 PCT/US2003/040812

What Is Claimed Is:

1. A method of manufacturing a clip comprising the steps of:

forming the precursor of a clip from a material comprising a superelastic alloy which has an austenitic state and a martensitic state, said precursor having a generally annular body which is generally planar and having one or more tines which extend radially outwardly from said body;

inverting said precursor such that said tines extend radially inwardly;

heating said precursor in its inverted configuration to cause said alloy to become substantially austenitic; and

quenching said heated precursor to form a clip which is substantially austenitic.

- 2. The method of claim 1 wherein said alloy is nickel-titanium.
- 3. The method of claim 1 wherein said body comprises a plurality of looped elements.
- 4. The method of claim 1 wherein, after inversion, at least two tines are in side-by-side relationship.
- 5. The method of claim 1 wherein, after inversion, at least two tines are in over-and-under relationship.
- 6. The method of claim 1 wherein at least one tine is longer than a radially opposed tine.
- 7. The method of claim 1 wherein said forming step comprises cutting said precursor from a sheet of material comprising a superelastic alloy.
- 8. A method of manufacturing a clip comprising the steps of:

forming the precursor of a clip from a material comprising a superelastic alloy which has an austenitic state and a martensitic state, said precursor having a generally annular body which is generally planar and having one or more tines which extend radially inwardly from said body;

said precursor having a lateral dimension which is substantially larger than that of the clip;

compressing said precursor in a radially inward direction to bring said tines substantially closer together;

heating said precursor in its compressed configuration to cause said alloy to become substantially austenitic; and

WO 2004/060169 PCT/US2003/040812

quenching said heated precursor to form a clip which is substantially austenitic.

- 9. The method of claim 8 wherein said alloy is nickel titanium.
- 10. The method of claim 8 wherein said body comprises a plurality of looped elements.
- 11. The method of claim 9 wherein the nickel titanium has a grain orientation and at least two tines have a longitudinal dimension transverse to the grain orientation.
- 12. The method of claim 8 wherein, after compression, at least two tines are in side-by-side relationship.
- 13. The method of claim 1 wherein, after compression, at least two tines are in over-and-under relationship.
- 14. A clip manufactured according to the method of claim 1.
- 15. A clip manufactured according to the method of claim 6.
- 16. A clip manufactured according to the method of claim 8.